

Applicants: Short et al.  
Application No: 10/599,943  
Amendment After Final Rejection  
Docket No.: P-7735 (102-682 PCT/US)  
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## **REMARKS**

Claims 1-16 and 26-31 are pending. Claims 1, 6, 26, and 29 have been amended. Claim 29 has been cancelled. Support for the claim amendments can be found throughout the specification, in particular, pages 16, 19 and Figure 5, as originally filed. No new matter has been added.

### **Applicants' Response to 35 U.S.C. §102 Rejection over Short & Whittle**

Claims 1, 8-16 and 27-31 were rejected under 35 U.S.C. §102(a) as allegedly anticipated by WO 01/031339 to Short et al. (hereinafter “Short & Whittle”) as evidenced by WO 98/19161 to Short et al. (hereinafter “WO 98/19161”) and Sigma Catalog, 2000-2001, page 337 (hereinafter “Sigma”).

The Examiner alleges that Short & Whittle teaches a method according to claim 1, based on the teachings of WO 98/19161 and Sigma. The Examiner alleges that WO 98/19161 and Sigma teach washing buffers for ELISA in the ranges of 150 mM to 500 mM are standard.

Applicants have amended claim 1. In particular, the salt concentration has been amended to require 500 mM to 2 M NaCl. Nowhere in the cited references is this range of salt concentration disclosed or suggested. Furthermore, enzyme-linked immunosorbent assays (ELISA) are used for detecting the presence of a biological agent in an assay. Detecting bound biological agents is the purpose of ELISA. ELISA utilizes a low concentration of NaCl in the washing solution, as described on page 16 of the instant specification. Utilizing this low level does not dissociate the biological agent from the surface being tested. (See Instant Specification, page 19, Example 5). Accordingly, Applicants respectfully submit that utilizing washing buffers for ELISA and the method according to the present claims is easily distinguishable to one of skill in the art. It is respectfully submitted that claims 1, 8-16 and 27-31 are patentable over Short & Whittle.

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**Applicants' Response to 35 U.S.C. §102 Rejection over Short**

Claims 1-16 and 26-31 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by WO 2004/040308 A1 to Short et al. (hereinafter "Short") as evidenced by Dako General ELISA Procedure, February 2002 (hereinafter "Dako").

The Examiner alleges that Short teaches a method according to the present claims and points to an ELISA reference for support of the concentration ranges. As stated above, Applicants have amended the claims to require the NaCl concentration to be greater than 500 mM.

As described in the specification, the present invention is directed to the selective removal or disassociation of a biological entity from a plasma polymerized surface, particularly a plasma polymerized surface of an organic monomer including allylamine. Nowhere in the cited references is this range of salt concentration disclosed or suggested. Furthermore, as stated above, Applicants respectfully submit that utilizing washing buffers for ELISA and the method according to the present claims is easily distinguishable to one of skill in the art. It is respectfully submitted that claims 1-16 and 26-31, are patentable over Short.

**Applicants' Response to 35 U.S.C. §103 Rejection over Short**

Claims 1-16 and 26-31 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Short & Whittle, as evidenced by WO 98/19161 and Sigma, in view of WO 94/10938 to Marchant (hereinafter "Marchant") and Schwartz et al., Glycobiology, 2003, vol 13, No. 11, p. 749-754 (hereinafter "Schwartz").

The Examiner acknowledges that Short & Whittle do not teach a salt concentration of about 100mM to 2 M NaCl, but alleges that this would be obvious based on the teachings of Marchant and Schwartz. Applicants respectfully traverse.

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Marchant is directed to a plasma polymer-modified surface that may have heparin attached thereto. Applicants respectfully submit that the Examiner's interpretation of this reference is misplaced. Marchant teaches that a 3 M NaCl liner salt gradient was utilized with a column to obtain polysaccharides that had an affinity for ATIII. One of skill in the art would appreciate that a linear salt gradient is defined as an initial salt concentration of 3 M that increases to a higher ionic strength. Accordingly, it would not be obvious for one of skill in the art to select a salt concentration of between 500 mM NaCl to 2 M NaCl based on this reference.

Schwartz teaches a carbohydrate array to be used for profiling antibodies. The substrates of Schwartz are not plasma polymerized. Furthermore, Schwartz teaches away from dissociation considering its statement that binding is detected after washing the glycan array with a 2M solution. (Schwartz, page 753).

It is respectfully submitted that claims 1-16 and 26-31 are patentable over Short & Whittle, WO 98/19161, Sigma, Marchant and Schwartz, each taken alone or in combination.

#### Applicants' Response to Double Patenting Rejection

Claims 1-16 and 26-31 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 1, 3-25 and 33-38 of co-pending U.S. Application No. 10/533,063, in view of Schwartz and Sigma.

Claims 1-16 and 26-31 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 85, 87, 90-94, 96, 102, 103, 108, 109 and 112-123 of co-pending U.S. Application No. 10/560,210, in view of Schwartz and Sigma.

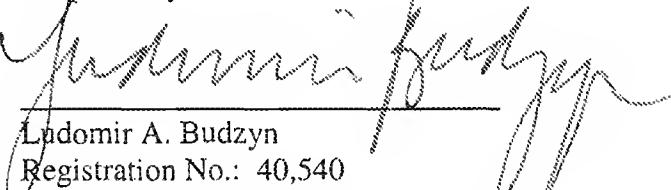
Claims 1-16 and 26-31 are rejected on the ground of nonstatutory obviousness-type double patenting as allegedly being unpatentable over claims 41, 47-50 and 54 of co-pending U.S. Application No. 10/509,431, in view of Marchant, Schwartz and Sigma.

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Applicants respectfully submit that the amendments overcome the double patenting rejection. However, in the interest of advancing prosecution, Applicants will consider filing a terminal disclaimer, or canceling/amending claims, as necessary once any of the claims have been allowed. Applicants request the issuance of an *Ex parte Quayle* action if this case is in all other respects found allowable.

Favorable action is earnestly solicited. If there are any questions or if additional information is required, the Examiner is respectfully requested to contact Applicants' attorney at the number listed below.

Respectfully submitted,



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